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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/554,224

10/24/2005

Kuniaki Ishibashi

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07/01/2009

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EXAMINER

HUDA, SAEED M

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

07/01/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/554,224	ISHIBASHI ET AL.	
	Examiner	Art Unit	
	SAEED M. HUDA	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/20/2009 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claim 04/20/2009 have been considered but are moot in view of the new ground(s) of rejection.

Applicant states that if a polymer film is stretched in the width direction continuously it produces a birefringent film and a bowing phenomenon may occur. Though this may be true, Applicant states that it is **generally necessary** to arrange the birefringent film and the polarizing film so that the slow axis of the birefringent film is parallel to the transmission axis of the polarizing film. In general, the direction of the slow axis of a birefringent film coincides with the film stretching direction, while the direction of the transmission axis of a polarizing film coincides with the direction perpendicular to the film stretching direction ([0003]).

Applicant goes on to state that it would be impossible for the birefringent film of Sakamaki to be arranged together with the polarizing film in the longitudinal direction and attached to the polarizing film continuously in the sates where the transmission axis is parallel to the slow axis as described, but does not provide support for this statement.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1 and 3-8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 11/244,159. Although the conflicting claims are not identical, they are

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not patentably distinct from each other because the claims of the applicant (broad) are embraced by the copending application (narrow).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

With regard to claim 1 of application 11/244,159, the copending application teaches, stretching in the widthwise direction while shrinking in the longitudinal direction. The copending application further teaches the same ratios as the application being examined (SMD and STD). Additionally the copending application provides further teachings such as having an Nz coefficient, thus making it narrower than the current applications claim (1). The copending application is narrower than the current application, thus claim 1 of the current application is embraced by the copending application.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 and 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakamaki (US 20020008840) in view of Applicant's Admitted Prior Art (APA).

a. Regarding claim 1, Sakamaki teaches a method for stretching an optical polymer film (birefringent film) as well. Sakamaki teaches the stretching of the polymer film in the **width direction with a ratio of 1.1 to 20.00** (Page 2, [0025]).

Furthermore, Sakamaki teaches the **shrinkage of the polymer film while stretching in the width direction** (Page 5, [0119]). Additionally Sakamaki teaches the **shrinkage being 10% or more** (Page 4, [0111]). The shrinkage taught by Sakamaki is seen as longitudinal shrinkage as the polymer film sheet is being held by points A1 and C1 (An and Cn: Figure 1) prohibiting shrinkage in the width direction. The above mentioned ranges for longitudinal shrinkage and expansion by width are embraced by the equation provided by claim 1 of the applicant. Sakamaki fails to explicitly teach wherein the slow axis of the birefringent film is in a direction that coincides with a direction in which the polymer film is stretched.

APA teaches that in the in the case where such a birefringent film is used in a liquid crystal display together with a polarizing film, it is generally necessary to arrange the birefringent film and the polarizing film so that the slow axis of the birefringent film is parallel to the transmission axis of the polarizing film. In general, the direction of the slow axis of a birefringent film coincides with the film stretching direction, while the direction of the transmission axis of a polarizing film coincides with the direction perpendicular to the film stretching direction ([0003]). It would have been obvious to one having ordinary skill in the art at the time of the invention to use the setup of APA in the invention of Sakamaki because this is a common setup used in the production of said film as exemplified by the teachings of APA. Additionally, it is possible to produce a

birefringent film that is unexpectedly has excellent appearance with variations in birefringence, retardation, and alignment axis angle being suppressed ([0009]).

b. Regarding claims 3-6, Sakamaki teaches a stretching range of 1.1 to 20 (Width) and a shrinkage ratio of 10% longitudinal (see above). The mentioned width and longitudinal ratio's anticipate the limitations of claims 3-6. For example, the beginning dimension of the film is 1 in the width and length ratio. A ratio of 1.3 applied in the width direction (stretching) would provide **a value of .877** $((1/1.3)^{1/2})$. As noted above, shrinkage of 10% would give **a SMD value of 0.9**.

The above calculated values fully comply with the equation provided by claim 1.

7. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakamaki (US 20020008840) in view of Applicant's Admitted Prior Art (APA) as applied to claim 1 above, and in view of Takahashi (US 20060262401).

Sakamaki fails to teach the stretching and shrinkage of the polymer film on a base at the same time. Takahashi teaches a method for producing a birefringent film similar to the applicants (i.e. forming the film directly on a support base). Furthermore Takahashi teaches the use of a support base material on which the **formation of the film, shrinking and stretching** is conducted (Page 7, [0099]). It would have been obvious to one of ordinary skill in the art to use Takahashi's support base material process with Sakamaki's process because the support base material would result in high production efficiency, high processing precision, and a continuous production process is possible (Page 7, [0099]) Additionally the use of a base which comprises the stretching and shrinking step would obviate any problems (e.g. inadvertently damaging

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the film) which could arise during the transferring of the film from the formation station to the stretching/shrinking station.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAEED M. HUDA whose telephone number is (571)270-5514. The examiner can normally be reached on 8:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KHANH NGUYEN/
Primary Examiner, Art Unit 1791

/SAEED M. HUDA/
Examiner, Art Unit 1791